



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/032,893	02/27/1998	JOHN O. BIESER	41824B	1428

7590

07/15/2003

Jacqueline M. Hutter
Needle & Rosenberg, P.C.
Suite 1200, The Candler Building
127 Peachtree Street, N.E.
Atlanta, GA 30303-1811

EXAMINER

JUSKA, CHERYL ANN

ART UNIT

PAPER NUMBER

1771

39

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

A 939

Office Action Summary

Application No.

09/032,893

Applicant(s)

BIESER ET AL.

Examiner

Cheryl Juska

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Response to Amendment

1. Amendment D, submitted as Paper No. 38 on April 15, 2003, has been entered. Claim 9 has been amended as requested. The pending claims are 1-6, 9-12, and 15-17.
2. Said amendment is sufficient to withdraw the 112, 2nd rejection set forth in section 5 of the last Office Action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 9-12, 15, and 16 are rejected under 35 USC 103(a) as being unpatentable over US 6,344,515 issued to Parikh et al. in view of US 5,545,276 issued to Higgins and US 5,240,530 issued to Fink.

Parikh discloses an adhesive composition comprising at least one substantially random interpolymer and a vinylidene monomer (abstract). Said adhesive composition may also contain an extending or modifying composition such as Dow's Affinity™, a substantially linear ethylene polymer (SLEP), such as that disclosed in US 5,272,236 and US 5,278,272, both issued to Lai et al. (col. 14, lines 31-67 and col. 17, lines 11-17). Said modifying composition may be included in the adhesive in an amount ranging from 5 to 75% by weight (col. 19, lines 25-30). The short

Art Unit: 1771

chain branching distribution index (SCBDI) for said SLEP is preferably greater than 50%, more preferably greater than 70%, and most preferred greater than 90% (col. 15, lines 16-34). The SLEP will be an interpolymer of ethylene with at least one C₃-C₂₀ α -olefin (col. 16, lines 18-25). Lai's disclosure teaches said SLEP has the presently claimed melt flow ratio, molecular weight distribution, and critical shear rate (Lai '272, claim 1). [Note applicant also discloses the compositions of the cited Lai patents as suited for the present invention. See specification, page 17, lines 1-6.]

Parikh states, "The compositions of the invention will have utility in applications which adhesives, particularly hot melt adhesives are typically employed....The compositions may be readily extruded onto a variety of substrates, including but not limited to carpet backing..." (col. 21, lines 1-13). Thus, Parikh teaches the present invention with the exception of the claimed carpet structure. Since Parikh is silent with respect to a structure of a carpet for which the inventive composition is suited, one must look to the prior art for guidance on how to employ an adhesive composition with a carpet.

Conventional carpets are comprised of a primary backing, tufts therein, an adhesive backcoat, and an optional secondary backing. Additionally, the adhesive backcoat penetrates into the primary backing and the tufts in order to secure said tufts in said primary backing. For example, Higgins teaches known prior art tufted carpet comprise a primary carpet fabric having tufts therein and an adhesive precoat layer, which comprises either a latex or hot melt adhesive, for holding said tufts in place (col. 1, lines 23-33 and col. 5, lines 59-67). The adhesive precoat can be a hot melt adhesive such as those well known in the art (col. 6, lines 25-33). The tufts or

Art Unit: 1771

face yarns may be made of nylon, polyester, or polyolefins, such as polyethylene and polypropylene (col. 6, lines 14-24).

Similarly, Fink teaches known prior art tufted carpets include face fiber tufted through a primary backing and an adhesive backcoat “in order to secure the face fiber to the primary backing” (col. 1, lines 12-24). Historically, the adhesive backcoats have been of a latex (col. 1, lines 24-26 and lines 52-63). However, a known alternative to latex backcoats are hot melt adhesive backcoats (col. 2, lines 4-23). Said hot melt adhesives have sufficient flow (i.e., low enough viscosity) to wet and penetrate the backing surfaces and tuft stitches (i.e., encapsulate) (col. 2, lines 23-30 and 55-64). A particular hot melt adhesive is chosen on its suitability in adhering the tufts to the primary backing (col. 3, lines 22-29). The face fibers or tufts may be made of nylon, polyester, or polypropylene (col. 8, lines 14-24), while the primary backing may be a woven or nonwoven fabric of jute, polypropylene, nylon, or polyester (col. 1, lines 37-43).

Thus, it would have been obvious to employ the adhesive composition of Parikh as adhesive backcoat in known carpet structures comprising a tufted primary backing and, optionally, a secondary backing, such as those taught by Higgins and Fink. Motivation to do so is found in the explicit teachings of Parikh that said composition is suited as an adhesive for coating a carpet backing, but the lack of a teaching to a particular carpet structure.

With respect to the claimed tuft bind strength, it is asserted that a known carpet structure, such as that taught by Higgins and Fink, having the Parikh composition as an adhesive backcoat would meet the tuft bind strength limitation, since the carpet of the combination of art meets all the structural and chemical limitations of the claim. In other words, “Products of identical

Art Unit: 1771

chemical composition can not have mutually exclusive properties.” *In re Spada*, 15 USPQ2d 1655.

With respect to claim 9, a carpet having polypropylene face yarns, a polypropylene primary backing, and the Parikh adhesive backing would meet the limitation that the adhesive composition has a different olefin chemistry than the face fibers or primary backing. Regarding the label recitation of claim 9, it is noted that the ‘recyclable representation of the label or literature’ is not given patentable weight at this time because the words or symbols written on a label or literature are not structural limitations of the claimed carpet. Additionally, applicant is hereby given Official Notice that labels and/or literature are included with commercial carpets for sale in the United States. Thus, it would have been obvious to one skilled in the art to include a label or literature on the carpet having the Parikh adhesive backing. Therefore, claims 1-6, 9-12, 15, and 16 are rejected as being obvious over the cited prior art.

5. Claim 17 is rejected under 35 USC 103(a) as being unpatentable over the cited Parikh patent in view of the cited Higgins and Fink patents as applied to claims 1 and 16 above, and in further view of US 5,741,594 issued to Jialanella.

The prior art discussed above does not explicitly teach a secondary backing comprising a homogenously branched ethylene polymer (HBEP) having a SCBDI of greater than or equal to 50%. However, as discussed in previous Office Actions, Jialanella discloses a laminate material comprising a SLEP, including HBEP's. As asserted by applicant in previous discussions (Paper No. 30, Request for Reconsideration, page 3, lines 6-10 and Paper No. 28, Interview Summary of July 11, 2002), Jialanella teaches said laminate material as a secondary carpet backing. Thus, it would have been obvious to one skilled in the art to employ the Jialanella secondary backing for

Art Unit: 1771

the secondary backing of the Parikh, Higgins, and Fink carpet, with the expectation of producing a carpet having improved delamination resistance and good recyclability. Therefore, claim 17 is rejected over the cited prior art.

Response to Arguments

6. Applicant's arguments have been carefully considered and are answered below to the extent that said arguments are relevant to the rejections set forth above.

7. Applicant traverses the examiner's assertion that Parikh teaches one embodiment of the invention is an extruded hot melt adhesive for a carpet backing. Applicant disagrees that the Parikh recitation supports using the adhesive composition as "adhesive materials for carpet backing as recited in the claims" (Amendment D, page 2, paragraph 6). Applicant contends that the one skilled in the art would understand said recitation to be a teaching that the adhesive can be placed onto the back of an already formed carpet backing (Amendment D, page 3, lines 1-9). In response, it is noted the entire Parikh recitation in question is as follows (col. 21, lines 1-13):

The compositions of the invention will have utility in applications in which adhesives, particularly hot melt adhesives are typically employed. Some representative examples include packaging, box and carton sealing, bookbinding, lamination of veneers to a substrate, tapes, and label. The compositions may further be utilized in multiplayer food packaging structures wherein at least one layer of the structure is aluminum. The compositions may be readily extruded onto a variety of substrates, including but not limited to carpet backing, flooring tiles and sheets, and woven and nonwoven fabric. The compositions may similarly be molded into a variety of shapes, including but not limited to shoe soles, seals, toys, durable goods, wire and cable, and gaskets.

Hence, it is the examiner's position that Parikh teaches hot melt adhesives which can be extruded onto substrates such as carpet backings. In the carpet art, one of ordinary skill would readily understand this teaching to mean an adhesive backcoat. Support for this position is first found in

Art Unit: 1771

the conventional use of hot melt adhesives extruded onto tufted primary backings for encapsulating said tufts. [Note the Higgins and Fink discussions above.] Secondly, support can be found in the fact that hot melt adhesives are more commonly extruded onto a tufted primary backing as an adhesive backcoat than extruded onto the back of a finished carpet (i.e., onto the back of a secondary backing). Even if, as applicant asserts, Parikh intended the passage to mean coating the back of a finished carpet, said passage can still readily be understood by one skilled in the art to mean an adhesive backcoat, due to the convention in the art of hot melt adhesives being employed as adhesive backcoats. Thus, applicant's argument is found unpersuasive.

8. Applicant also traverses the examiner's reliance on Parikh's working examples to support the notion that Parikh teaches an extruded hot melt adhesive for carpet backing (Amendment D, page 3, 1st paragraph). In response, it is asserted that applicant has misunderstood the examiner's discussion of the working examples. Said working examples were mentioned in the last Office Action to point out that Parikh teaches both pressure sensitive adhesive and hot melt adhesives, not to say that the hot melt adhesives of the working examples were taught as suitable for carpet backings.

9. With respect to applicant's traversal of the examiner's reliance upon Official Notice to teach known carpet structures (i.e., tufted primary backing, adhesive backcoat, and secondary backing), the examiner respectfully disagrees (Amendment D, page 4, section II.a.). In particular, the examiner disagrees that said Official Notice formed the primary grounds for rejection, but rather was employed as a secondary ground with respect to the Parikh teachings as the primary grounds. Additionally, the examiner disagrees with applicant's traversal that the Official Notice is based upon the examiner's personal knowledge. To properly traverse an

Art Unit: 1771

Official Notice, applicant must point out the supposed errors in the examiner's reasoning, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. Applicant has failed to adequately traverse said Official Notice, but merely requests the examiner provide an affidavit. Despite applicant's unpersuasive traversal of the Official Notice, in order to further prosecution, the examiner has withdrawn the rejection based upon Parikh and said Official Notice and replaced it with the above rejection.

10. In response to applicant's argument that Parikh only used HBEP adhesive materials as extenders or modifiers for a styrene interpolymers, while the present invention uses it without said styrene (Amendment D, page 5, section b), applicant's arguments are outside of the scope of the present claims. It is noted that the feature upon which applicant relies (i.e., composition excludes HBEP as an extender or modifier) is not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The present claims do not exclude the presence of other components in the HBEP adhesive backcoat in that the claim recites "the adhesive polymer *comprises* at least one HBEP." [Emphasis added.] Additionally, it is noted that Parikh's HBEP may be present in the inventive adhesive in an amount up to 75% by weight (col. 19, lines 25-30).

11. In response to applicant's assertion that the examiner has not demonstrated that a conventional carpet of a tufted primary backing and optional secondary backing having a Parikh adhesive backcoat would necessarily possess the claimed tuft bind strength, it is reiterated that the prior art product has the same structure and chemistry as the instant product. This amounts to an overwhelming amount of extrinsic evidence making clear that the missing descriptive matter

Art Unit: 1771


(i.e., the claimed tuft bind strength) is necessarily present in the prior art product. It is the examiner's position that one skilled in the art would reach this conclusion beyond mere probabilities or possibilities. Since the Patent Office cannot manufacture products or obtain and compare prior art products, it is not Office's job to provide evidence, just sufficient reasoning that the property necessarily flows from the prior art product. Thus, the burden has properly been shifted to applicant to prove otherwise. So far, applicant has failed to do so.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



CHERYL A. JUSKA
PATENT EXAMINER

cj
July 14, 2003